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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,517

11/21/2003

Steven R. Sedlmayr

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07/12/2004

Law Office of Roxana H. Yang
P.O. Box 3986
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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,517

Applicant(s)

SEDLMAYR, STEVEN R.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 132 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 132 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 132 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolas et al., U.S. Patent No. 5,299,036 in view of Miyatake et al., U.S. Patent No. 4,943,154 and of Konno et al., U.S. Patent No 4,497,015.

Nicolas et al. disclose a projection apparatus (fig. 4) comprising: [a] means (2a) for producing a primary beam of light having a predetermined range of wavelengths and randomly changing orientations of a chosen component of electric field vectors; [b] means (CSC) for separating the primary beam of light into three primary color beams of light (b, r, v), each of the primary color beams having the same selected predetermined orientation of a chosen component of electric field vectors as that of the other primary color beams (GP, from ESE); [c] three means (5) for altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the separate primary color beams of light by passing the plurality of portions of each of the separate primary color beams of light through a respective one of the altering means whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate primary color beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of

Art Unit: 2872

the separate primary color beams of light passes through the respective one of the means for altering the selected predetermined orientation of the chosen component of the electric field vectors (column 5, lines 50-56); [d] means (CSC1) for combining the altered separate primary color beams of light into a single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light by dichroic reflection surfaces intersecting in X-letter form (fig. 4); [e] means (A) for resolving from the single collinear beam of light a first resolved beam of light having substantially a first selected predetermined orientation of a chosen component of electric field vectors and a second resolved beam of light having substantially a second selected predetermined orientation of a chosen component of electric field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electric field vectors are different from one another (column 5, lines 57-61); [f] means (LP) for passing at least one of the resolved beams from the single collinear beam of light to a projection means (EP). Nicolas et al. discloses the claimed invention except for the primary beam being a substantially uniform flux intensity substantially across the initial beam of light and a rectangular cross sectional area and not explicitly stating [g] a driving circuit for driving each of the three altering means according to the signal means; wherein the color separating means comprises a first flat-plate type dichroic mirror and a second flat-plate type dichroic mirror intersecting in X-letter form, light paths from the intersecting part to each of the altering means having lengths such that the path of the color light which advances straightly through the color separating means is the shortest, the second dichroic mirror being constructed by two dichroic mirrors separated at the intersecting part so that the dichroic reflecting surfaces

Art Unit: 2872

of the two dichroic mirrors are placed on mutually different planes to allow two-edge surfaces of the two dichroic mirrors forming the intersecting part to be seen as being at least partially overlapping when the color-separating means is observed from the output light side in a direction along its input light. Miyatake et al. teaches a projection apparatus (fig. 1) with a driving circuit (67) for driving each of the three altering means (61, 62, 63) according to the signal means (Y) and wherein the color separating means (58) comprises a first flat-plate type dichroic mirror and a second flat-plate type dichroic mirror intersecting in X-letter form, light paths from the intersecting part to each of the altering means having lengths such that the path of the color light which advances straightly through the color separating means is the shortest, the second dichroic mirror being constructed by two dichroic mirrors separated at the intersecting part so that the dichroic reflecting surfaces of the two dichroic mirrors are placed on mutually different planes to allow two-edge surfaces of the two dichroic mirrors forming the intersecting part to be seen as being at least partially overlapping when the color-separating means is observed from the output light side in a direction along its input light (fig. 1 and column 1, lines 38-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the driving means and color separating means of Miyatake et al. in the system of Nicolas et al. as they are commonly available and easy to obtain. Konno et al. disclose a light illumination device (fig. 5) which produces a primary beam (at M) which has a substantially uniform flux intensity substantially across the initial beam of light (column 5, lines 43-52) and has a rectangular cross sectional area (using lens element 102, fig. 3; column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the light source of

Art Unit: 2872

Nicolas et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yajima et al., U.S. Patent No. 4,909,601 discloses a projection display with X-letter form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF

July 8, 2004



MARK A. ROBINSON
PRIMARY EXAMINER